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The Effectiveness of Career Exploration Program for High School Students

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Abstract. The purpose of this study to assess the effects of an 8-week Career exploration Program (CEP) on high school students' career maturity and self-concept in Malaysia. This study was based on a pretest and posttest design using a control group. Data were collected from 69 high school students representing the experimental group and 70 high school students making up the control group. Modes of measurement consisted of the Crites Career Maturity Inventory and the Tennessee Self-Concept Scale. Data for this study were coded numerically and analyzed using analysis of covariance. The results revealed that the sample's career maturity and self-concept improved statistically significant. Discussion and implications for school counselor are discussed.

Keywords: career exploration program, career intervention, career maturity, self-concept.

1. Introduction

Career is very important in an individual's life. It is essential for students to develop career maturity and self-concept during the high school years. Career development and preparation for adolescents can involve such tasks as establishing stable vocational preferences, narrowing one's occupational choices, developing career goals and engaging in long-term career planning (Skorikov, 2007)[1]. Adolescents are still developing their career awareness and career interests, which can result in their occupational choices continuously fluctuating (Heiwig, 2003)[2]. However, if students are provided with effective career guidance during their state of occupational inconsistency, they can become both knowledgeable and focused in their career development (Trusty, Niles, & Carney, 2005)[3].

One of the important methods suggested in past research in order to help the students to increase their knowledge of potential occupations, as well as to enhance their career maturity and self-concept, is by implementing career counseling interventions or programs. A career intervention could increase students' awareness of their interests, as well as their career decision-making skills (Loos, 2008; Osborn & Reardon, 2006)[4-5]. Career counseling interventions or programs, however, must be cautiously selected, and research calls for studies that utilize experimental research in order to observe the effects of a career program and/ or intervention (D'Achiardi, 2005; Loos, 2008)[6,4].

The majority of research on the efficacy of career program, however, has neglected to utilize populations in Asia, such as Malaysia, as samples. In Asian countries, the students usually choose their career based on their parents' criteria. It is found that Asian students really need help through services of career counselling according Pope, Cheng, & Leong, 1998[7].. In Malaysia, many research findings showed that secondary school students in Malaysia are facing problems of not being prepared in making career planning (Guan, 2004; Kamarul, 2006; Teo, 2005)[8-10]. From the past research done in Malaysia, it is noted that there is still no experimental research regarding outcome results of specific career interventions that can enhance the career maturity and self-concept among secondary school students.

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The Career Exploration Program (CEP) was designed by the researcher for this study. The CEP utilized the Super Vocational Development Theory (1953, 1980, 1990)[11-13]. The activity under the Holland Typology Theory is combined and used in the CEP. According to Amla (2000), the combination between the Super Vocational Development Theory with Holland Typology Theory in the career program is regarded as practical and economical because both these theories complement each other[14].

The CEP was divided into five stages. The first stage, self-knowledge, focused on activities designed to assist students in recognizing their personal interest, aptitude, and work values. The second stage, educational knowledge, was designed to provide students with information on course requirements, as well as information on the various vocational programs available in Malaysia. The third stage, career knowledge, focused on gathering career information as well as learning the occupation names. The fourth stage, career goals, focused on activities designed to assist the students in linking the career information with their self-information, and in formulating their general career goals. The fifth stage, career plans, focused on activities designed to help the students plan their subjects and courses. Tentatively, eight sessions were allocated to complete the topics in the Career Exploration Program. Each session was around 90 minutes and this program took over 8 weeks.

The research questions addressed by this study were:

- Are there significant differences in the gains between the subjects in the experimental and control group on career maturity (CMI-R) after CEP?
- Are there significant differences in the gains between the subjects in the experimental and control group on self-concept (TSCS:2) after CEP?

2. METHOD

2.1. Participants

Particpants for the treatment and control groups were high school, Form Four students in Malaysia. The avarage age of particpants was approximately 16 years. Initially all the Form Four students ($N = 325$) in the selected typical school were involved in the sampling selection. The total number of subjects involved in this study was 160 with random sampling. The subjects were then randomly assigned into two groups. The random assignment helps to ensure the equivalence of groups and controls for the extraneous variables. Finally, the experimental group ($n = 80$) and the control group ($n = 80$). A blind draw was applied to choose experimental and control group. Slips were placed in a container; the slips were mixed so as to be distributed randomly thoroughly in the container. Without looking, the researcher selects the group; experimental group, followed by control group.

2.2. Instruments

The researcher used the 1995 Crites Career Maturity Inventory (Crites & Saviskas, 1995) to measure the sample's career maturity level. The Maturity Inventory consists of an attitude scale and a competence test)[15].

This study used the Tennesee Self-concept Scale, TSCS: 2 (Fitts & Warren, 1996) to measure the sample's self-concept level. This TSCS: 2 identifies six self-concept scales: Physical, Moral, Personal, Family, Social and Academic/Work)[16].

A pilot study was carried out to establish the reliability and validity of the two instruments. Internal consistency reliability estimate using the Kuder-Richardson Formula 20 for CMI-R, Bahasa Malaysia version was .71. Meanwhile, the Cronbach alpha method was used to determine TSCS:2 reliability in the local context and the value alpha is .862.

2.3. Procedures

The approval from the Education Planning and Research Division (EPRD), Ministry of Education was sought and obtained to conduct the study. With the approval from the EPRD, the State Education Department in Selangor, Malaysia was contacted to obtain permission and clearance to carry out the study in the selected school.

On the scheduled day, all the 160 subjects in the experimental and control groups were asked to take the pretest of CMI-R and TSCS:2. The career intervention was conducted by the researcher once a week for a period of 8 consecutive weeks. Each session of the career intervention lasted approximately 90 minutes. Immediately following the intervention, both groups completed the CMI-R and TSCS:2 as the posttest.

2.4. Research Design and Data Analysis

This study was based on a pretest-posttest control group design (Campbell & Stanley, 1966)[17]. Data for this study were coded numerically and analyzed using analysis of covariance. Multivariate Analysis of Variance, MANOVA and Multivariate Analysis of Covariance, MANCOVA was used to reduce the chances of Type 1 error.

Initially 160 subjects were selected randomly for this study. However, the data of only 139 subjects (86.88%) were used in subsequent analyses as twenty one of the subjects did not attend one or more of the program sessions or testing.

2.5. Results

- Pretest Differences Between Experimental and Control Groups

Multivariate Analysis of Variance, MANOVA was used to determine the statistical significance of differences between the experimental and control groups before the career intervention with regard to career maturity and self-concept. The significant level was set at $p < .05$ for all the statistical analyses. No significant differences was found between the experimental and control groups in the career maturity, CMI-R pretest [$F(1, 137) = .41$, $p > .05$] and self-concept TSCS:2 pretest [$F(1, 137) = .03$, $p > .05$]. Thus, initial equivalence was found between the experimental and control groups based on their pretest scores.

- Posttest Differences Between Experimental and Control Groups

Multivariate Analysis of Covariance, MANCOVA was performed to determine if there were statistically differences between experimental and control groups after the career intervention with regard to career maturity and self-concept levels. Significant differences were found between the experimental and control groups in the career maturity, CMI-R posttest [$F(1, 133) = 114.47$, $p < .05$] and self-concept, TSCS:2 posttest [$F(1, 133) = 51.94$, $p < .05$]. The experimental group has gained significantly in the CMI-R from the CEP compared to the control group (mean: Experimental = 34.92, control = 29.45). For TSCS: 2, the experimental group had also performed significantly better compared to the control group (mean: Experimental = 317.07, control = 291.68).

2.6. Discussion

In this study, the subjects in the overall experimental group who were given the career interventions via the CEP performed better than the control subjects with a mean score difference of 5.47 for the CMI-R measure. The findings of this study support the findings of other studies (Carver, 1996; D'Achiardi, 2005; Lusk-Head, 2003) where the experimental subjects gained in career maturity following CEP treatment[18,6,19]. Besides, the subjects in the experimental group in this study who were involved in the CEP performed better than the control group subjects with a mean score difference of 25.39 for the TSCS:2 measure. This finding agrees with the results of some earlier studies (Kunze, 1992; Portnoi, Guichard, & Lallemand, 2003)[20-21].

These two findings can be explained by suggesting that these increases in career maturity and self-concept could be due to students having learned more about themselves and where to obtain the information necessary when they are ready to look for it and explore their options. Additionally, past research has also shown that guiding adolescents about self-knowledge and career knowledge within a career guidance program can result in increased recognition of interest, occupations, educational opportunities and decision-making approaches (Osborn & Reardon, 2006)[5]. The results of this study support the need for program planning and for providing students with information on careers and education in order to enhance career maturity and self-concept.

The results of this study support the need for program planning and for providing students with information on careers and education in order to enhance students' career maturity and self-concept. High

school is the right time for the career guidance as the adolescents would be more prepared and need the career guidance.

2.7. Conclusion

This experimental study is an apprentice effort in Malaysian career and school counselling. This study investigated the effectiveness of the Career Exploration Program (CEP) on the career maturity and self-concept of High school students in a typical school. It is also hoped that this study would add to the pool of documented literature on career guidance and counseling of students and stimulate more research in this area so as to enable further understanding of the complexity of career development of adolescents.

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